Date of Meeting: June 2, 2010

BOARD OF SUPERVISORS

ACTION ITEM

11.b

SUBJECT: Transportation and Land Use Committee Report
SPEX 2009-0011, SPEX 2009-0029 & CMPT 2009-0002
Potomac Radio

ELECTION DISTRICT: Broad Run

CRITICAL ACTION DATE: June 21, 2010

STAFF CONTACT: Pat Giglio, Department of Planning

RECOMMENDATIONS:

Transportation and Land Use Committee: On May 19, 2010, the Transportation and Land Use Committee voted 4-0-1 (Kurtz-absent) to forward SPEX 2009-0011, SPEX 2009-0029 & CMPT 2009-0002 Potomac Radio to the Board Business Meeting without a recommendation.

Staff: Staff cannot support these applications due to inconsistencies with the Keynote Employment land use policies and environmental policies for uses within the floodplain as defined by the Revised General Plan. However, should the Board of Supervisors approve the applications, the applicant is in agreement with the Conditions of Approval which have been reviewed and approved by the County Attorney.

Planning Commission: The Planning Commission at their April 21, 2010 Work Session voted 6-3 (Commissioners Klancher, Robinson and Maio opposed) to approve CMPT 2009-0002 and forward the application to the Board of Supervisors for ratification based on the attached findings (Attachment 4). The Planning Commission also voted 6-3 (Commissioner Klancher, Robinson and Maio opposed) to recommend approval of SPEX 2009-0029, Potomac Radio subject to the Conditions of Approval dated March 23, 2010, which were revised to clarify Condition #7 pertaining to cessation of use, and based on the Findings contained in this Staff Report (Attachment 4 & 5). The Planning Commission did not review or provide advisory comments on SPEX 2009-00011 for the proposed use; which pursuant to the 1972 Zoning Ordinance requires only Board of Supervisors action.

BACKGROUND:

Potomac Radio, LLC, of Falls Church, Virginia has submitted an application for two Special Exceptions and Commission Permit approval to permit a "public utility, communications and transmission" (AM radio transmitter) within the FOD (Floodplain Overlay District) and PD-IP (Planned Development-Industrial Park) zoning district subject to the 1972 Zoning Ordinance. The subject site, a 7.5 acre lease area, is located in the northwest corner of the property which is owned by Loudoun Water and operated as the Broad Run Water Reclamation at 44771 Loudoun Water Way, Ashburn. The proposed AM Radio Transmitter on the subject site will consist of three (3) 195-foot self-supporting lattice towers with a buried grounding system consisting of 120 equally spaced copper wires extending in 200 foot radius around each tower. The radials which are the size of a pencil lead will be buried approximately four to six inches below ground level. A transmitter building (20'x25'), satellite dishes and auxiliary generator will be located in proximity to the proposed antenna arrays near an existing gravel road. The proposed

construction will require ground disturbing activities within the major floodplain as well as the removal of approximately two-acres of existing mixed bottomland and hardwood forest on the southern portion of the subject site (Attachment 2). The applicant has submitted a Planting Plan which proposes the planting of pine seedlings (loblolly pine), shrubbery and native grasses between the radials of the buried grounding system to mitigate the impacts of the proposed construction within the floodplain.

The Board of Supervisors (BOS) held a public hearing on this application on May 10, 2010. Two members of the public spoke in opposition to the application based on concerns with the environmental impact of the proposed construction within the floodplain and the loss of existing riparian forests. Six members of the public spoke in support of the application citing the importance of WAGE radio for providing local news and public service alerts/information. The Board of Supervisors in their discussions with staff and the applicant raised questions pertaining to flooding on the subject site, the precedent for constructing buildings within the floodplain and the overall environmental impact of the proposed construction within the floodplain. The Board concluded the hearing by voting 7-0-1-1 (Waters absent, Burk abstain) to forward the application to the Transportation and Land Use Committee for further discussion.

DISCUSSION:

At the May 19, 2010 Transportation and Land Use Committee (TLUC) meeting, the Committee raised several question pertaining to the percentage of local broadcasting that would be provided, potential environmental impacts within the major floodplain, frequency of flooding on the subject site, and the design of the proposed Planting Plan. The applicant at the time of the meeting was unable to commit to a percentage of local broadcasting but explained that the station signal would cover the metropolitan area. Staff reiterated that their would be impacts to the major floodplain and a loss of existing tree cover associated with the construction of the proposed AM Radio Transmitter, and that the environmental policies of the Revised General Plan do not envision or support this type of use within the floodplain. Staff also acknowledged that based on a previous zoning determination that the proposed AM Radio Transmitter which is defined as a "public utility-communication and transmission use" is permissible within the PD-IP zoning district and within the floodplain overlay district (FOD) under the 1972 Zoning Ordinance by Special Exceptions. Staff in response to the Committees' questions noted that only sewer pump stations have historically been constructed within the floodplain and that these structures are anticipated by the policies of the Revised General Plan due to their engineering requirements. A brief discussion pertaining to the design of the proposed AM Radio Transmitter facilities and their ability to withstand flooding followed. Staff confirmed that there would be no increase in flood hazards associated with the proposed construction and that the facility had been designed to remain operational in a flood event. Staff provided an overview of the proposed Planting Plan and the rationale behind the selection of the loblolly pine seedlings, which where chosen for their ability to tolerate wet conditions and deer browse. The Committee voted on a motion to approve the applications which resulted in a 2-2-1 (Burk, McGimsey-opposed, Kurtz-absent) tie vote. As a result of the tie vote the Committee voted to forward the application to the Board Business Meeting without a recommendation. The motion passed 4-0-1 (Kurtz-absent).

Following the May 19th TLUC meeting, the Applicant submitted additional information which addresses questions raised at the meeting (Attachment 3). The applicant has confirmed that the proposed transmitter building will be elevated constructed at elevation 215' which is approximately 3' below the major floodplain elevation of 218'. The transmitter building has been designed to withstand flooding and to be water tight so that the facility may remain operational if flooding where to occur. The applicant has included a sound analysis for the proposed emergency auxiliary generator that indicate that

the potential noise level when measured at the nearby Heron Nesting Area, with is located approximately 650' feet to the northeast, will be 47 dba, which is the equivalent to normal conversation (Attachment 2). The Virginia Department of Game and Inland Fisheries has substantiated this data, and does not believe that noise from the generator will adversely impact the Heron Nesting Area and/or Rookery. The applicant has also revised their construction plans to eliminate an onsite natural gas tank initially proposed to fuel the generator and instead will fuel the generator with an underground gas line. The applicant has also included a photography which depicts the equipment used to install the proposed buried ground system, which will be buried approximately 4"-6" below ground level (Attachment 3). The Conditions of Approval have been updated to eliminate Condition #6 Fuel Tank, which has been revised to indicate that natural gas, will be provided to the site by an underground line. Additionally, Condition #2 Riparian Planting Plan has been revised to extend the period of replanting for up to 6 years to provide greater assurance for the survivability of the proposed Planting Plan.

ISSUES:

Staff provides the following update subsequent to the May 19, 2010 TLUC meeting:

1. Conditions of Approval – Conditions have been reviewed by the office of the County Attorney and updates have been incorporated pertaining to the Riparian Planting Plan (Condition 2) and the Auxiliary Generator (Condition 6) (Attachment 5). The Applicant has reviewed these changes and is in agreement with them.

FISCAL IMPACT:

As is the case with most commercial, employment, and industrial uses, this project will generate sufficient revenues to offset the costs of those public services that it uses. Consequently, no adverse fiscal impacts are expected.

ALTERNATIVES:

The Board may approve, deny, or continue discussion of the Commission Permit and Special Exception request.

DRAFT MOTIONS:

1. I move that the Board of Supervisors ratify CMPT 2009-0002 Potomac Radio, subject to the plat dated February, 2009, revised through March 2, 2010, prepared by Patton Harris Rust & Associates, pc, based on the attached Findings for Approval (Attachment 4).

AND,

2. I move that the Board of Supervisors approve SPEX 2009-0011 and SPEX 2009-0029, Potomac Radio, subject to the plat dated February, 2009, revised through March 2, 2009 prepared by Patton Harris Rust & Associates, pc, based on the attached Findings for Approval (Attachment 4) and subject to the Conditions of Approval dated May 26, 2010 (Attachment 5)

OR

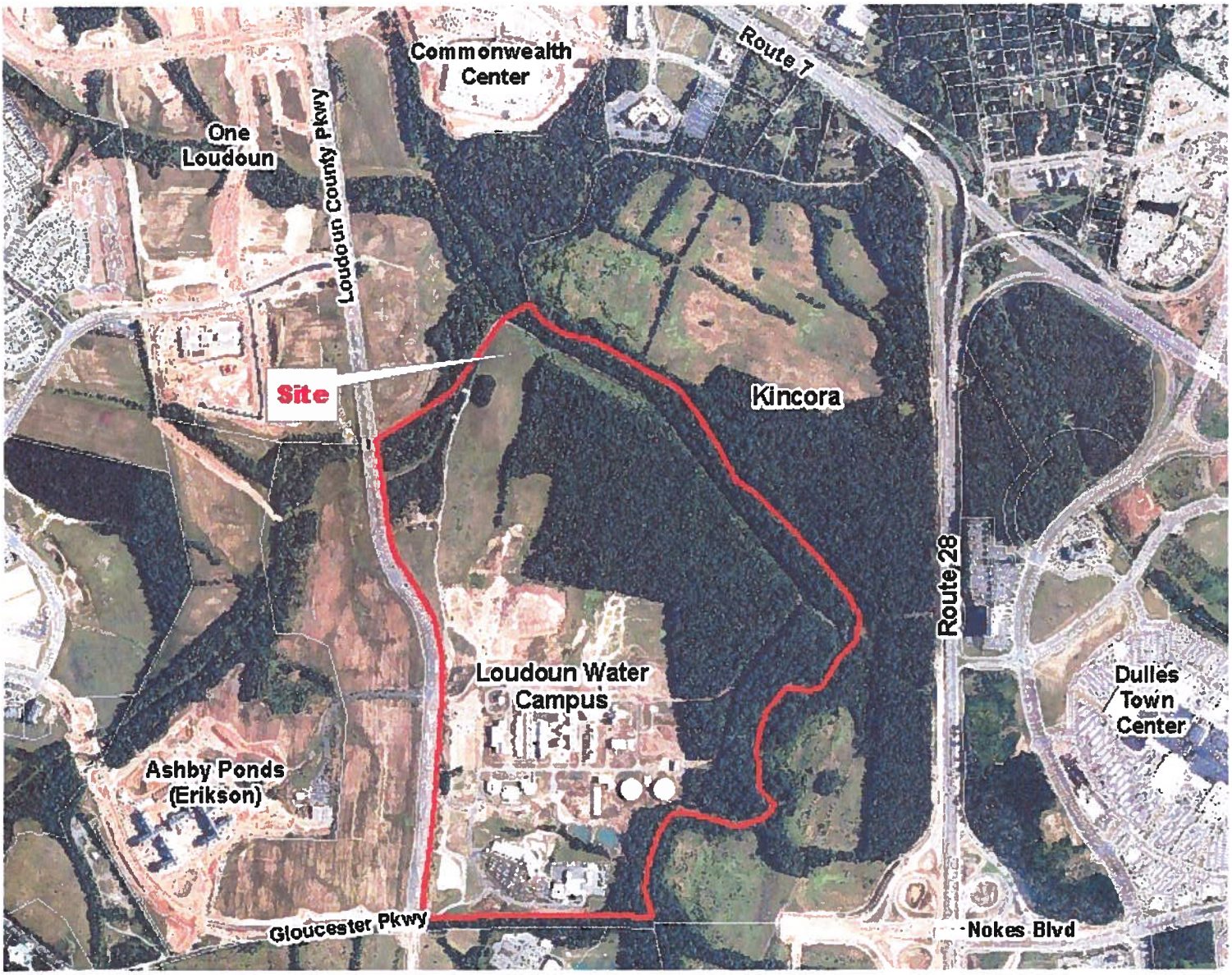
3. I move that the Board of Supervisors deny CMPT 2009-0002 Potomac Radio, based on the attached Findings for Denial (Attachment 6).

AND,

4. I move that the Board of Supervisors deny SPEX 2009-0011 and SPEX 2009-0029 Potomac Radio, based on the attached Findings for Denial (Attachment 6).

ATTACHMENTS:

VICINITY MAP

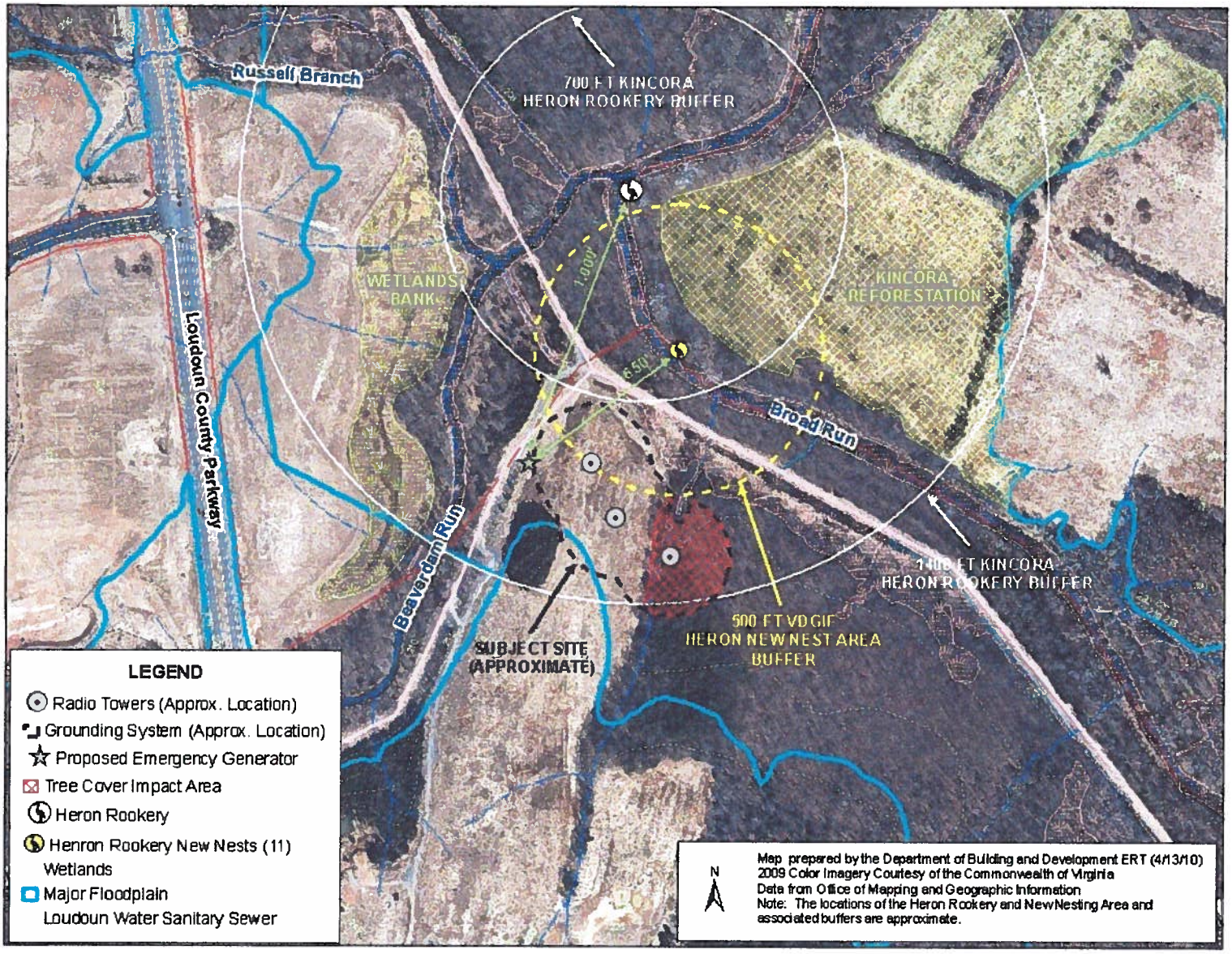


Directions:

From Leesburg, take Route 7 east to Loudoun County Parkway. Follow Loudoun County Parkway south. Turn left into the first entrance onto the Loudoun Water Campus. Turn left on the first gravel road, proceed through the gate and follow the road down the hill to the subject site located in the northeast corner of the property west of the existing sewer corridor.

ATTACHMENT 1

ENVIRONMENTAL FEATURES



ATTACHMENT 2

WALSH COLUCCI
LUBELEY EMRICH
& WALSH PC

Kimberlee Welsh Cummings, AICP
Land Use Planner
(571) 209-5773
kcummings@ldn.thelandlawyers.com

May 25, 2010

Via E-Mail Only

Pat Giglio, Planner III
Loudoun County Department of Planning
1 Harrison Street, S.E., Third Floor
P. O. Box 7000
Leesburg, Virginia 20177-7000

Re: Potomac Radio - SPEX 2009-0011, SPEX 2009-0029 & CMPT 2009-0002

Dear Pat:

As a follow up to the Transportation/Land Use Committee meeting held on May 19, 2010, and in preparation for the Board of Supervisors meeting scheduled for June 2, 2010, on behalf of Potomac Radio, LLC, I am providing the following information and attached documents for the meeting.

1. Transmitter building will be placed at a 215' elevation approximately 5 feet above the existing grade and no grading is proposed. The emergency generator will be located on the same slab as the Transmitter building. The 100-year floodplain high water mark is at an elevation of 218'.

2. Transmitter building color will match the other buildings on the Loudoun Water Campus.

3. Radio towers will be placed on foundations at the existing grade, no grading is proposed. If there is a flood, the tower foundations will be installed to withstand flooding and the equipment at the base of the towers can be replaced if necessary.

4. Emergency Generator will only be used when there is a power outage. The noise sound level is expected to be 47 dBA at 500 feet (Heron Rookery) [see Noise Report, attached as Exhibit 1]. The emergency generator will be fueled

by natural gas and connected to a gas line. Therefore, Condition 6 needs to be revised.

5. Radials will be buried 4"- 6" and up to 12" under the drainage feature. No grading is needed for the installation of the radials. The radials are buried by equipment that makes a narrow slit into the ground and this equipment is pulled behind a small tractor. Photographs of this type of equipment are attached as Exhibit 2.

If you have any questions, please do not hesitate to call me. Please include this information with your report for the June 2, 2010, Board of Supervisors meeting. Thank you for your continued work on these applications.

Sincerely,

WALSH, COLUCCI, LUBELEY, EMRICH & WALSH, P.C.

Kimberlee Welsh Cummings

Kimberlee Welsh Cummings, AICP
Land Use Planner

Attachments

cc: James M. Weitzman, Managing Member, Potomac Radio, LLC
Garrison C. Cavell, President, Cavell, Mertz & Associates, Inc.
Michael D. Rhodes P.E., Cavell, Mertz & Associates, Inc.
Steven A. Smith, President/Project Manager, Strategic Infrastructure Protection Technologies LLC/Potomac Radio WAGE
Sandra H. Williams, President, blueskies environmental associates, inc.
Mark W. Thomas, Director of Planning & Landscape Architecture, Patton Harris Rust & Associates, PC
J. Randall Minchew, Managing Shareholder, Leesburg Office, Walsh, Colucci, Lubeley, Emrich & Walsh, P.C.

Noise Report

Potomac Radio – SPEX 2009-0029 & CMPT 2009-0002
April 5, 2010

A. Common Noise Sound Levels

Source of Sound	dBA
Nearby Jet Plane, Firecracker	150
Jackhammer	130
Chainsaw	up to 125
Siren	120
Heavy equipment operation	95 to 110
Lawn mower	100
Tractor	90
Busy Traffic	80
Clothes Dryer	70
Sewing Machine	60
Normal Conversation	50
Quiet office	40
Whisper	30
Whisper at 5 feet	20
Rustling leaves	10

B. Potomac Radio Estimated Noise Sound Levels from the emergency generator

The emergency generator will only be used when there is a power outage. Generator suppliers provide sound emissions specifications with their equipment. The specific generator has not yet been selected. However, for purposes of estimating noise that may be produced from the generator when it is being used, the Applicant is basing their information on the Generac Power Systems, Inc. 6.8L Engine (see attached). The generator is designed to achieve a continuous sound level of approximately 74 dBA when measured approximately 23 feet (7 meters) from the generator.

Using the Generac Power Systems, Inc. supplied estimated noise levels and assuming a maximum sound level of 74 dBA at 23 feet from the generator, the sound level is expected to be 47 dBA at 500 feet (Heron Rookery, including new nests)[1]. This noise level is less than normal conversation, as stated in the list above.

An additional reduction of 5 dBA per 100 feet of depth can be realized if the area between the generator and the Heron Rookery contains trees and vegetation. The sound level provided above is based upon continuous noise, assumes open space and does not account for trees and vegetation.

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[1] Engineeringpage.com noise attenuation by distance.

Noise Report

ENGINEERING page

NOISE ATTENUATION BY DISTANCE (Point Source)

PROJECT DATA (Optional)

Project	Potomac Radio		
Remarks	noise levels from emergency generator to Heron Rookery		
Your ref	5370.2	Client	Potomac Radio
Identification		Client's ref	

CALCULATION INPUT

Source Noise Levels
Sound Pressure Level (SPL, Lp) at 23 ft from source 74 dB(A)

Transmission path
spherical

Immission Point (listener)
Distance from Source 500 ft

CALCULATION RESULTS

Sound levels
Source Sound Power Level (PWL) **101.9 dB(A)**

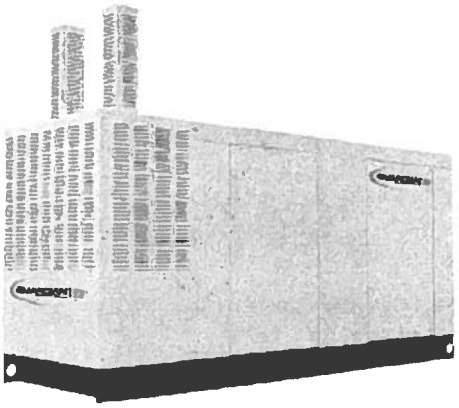
Attenuation
Attenuation by distance of 152.4 m 54.7

Immission (listener's) point
Sound Pressure Level (SPL, Lp) **47.3 dB(A)**

Standby Power Rating

100 kW 60 Hz

Liquid Cooled Gas Engine Generator Sets



Quiet-Test Mode
For Low Noise Exercise
- 61 dB(A) at 23 feet

GENERAC 6.8L ENGINE
Naturally Aspirated
Gaseous Fueled

UL 2200 Listed

STANDARD EQUIPMENT

- All input connections in one single area
- High coolant temperature shutdown
- Low oil pressure shutdown
- Low coolant level automatic shutdown
- Overspeed automatic shutdown
- Adjustable cranking timer
- Adjustable exercise timer
- Oil drain extension
- Cool flow radiator
- Closed coolant recovery system
- UV/Ozone resistant hoses
- Watertight state of the art electrical connectors
- Mainline circuit breaker
- Oil drain extension to frame rail
- Radiator drain extension
- Battery charge alternator
- 2 Amp static battery charger
- Battery and battery cables
- Battery rack
- Fan and belt guards
- Isochronous governor

FEATURES

- Innovative design and fully prototype tested
- UL2200 Listed
- Solid state frequency compensated digital voltage regulator
- Dynamic and static battery charger
- Sound attenuated acoustically designed enclosure
- Quiet test for low noise level exercise
- Acoustically designed engine cooling system
- High flow low noise factory engineered exhaust system
- State of the art digital control system
- Built-in kW, kVAR and power factor meters
- Watertight electrical connectors
- Rodent proof construction
- High efficiency, low distortion Generac designed alternator
- Vibration isolated from mounting base
- Matching Generac transfer switches engineered and tested to work as a system
- All components easily accessible for maintenance
- Electrostatically applied powder paint
- H-100 microprocessor control panel

GUARDIAN Elite
by Generac Power Systems, Inc.

APPLICATION & ENGINEERING DATA

100 kW

GENERATOR SPECIFICATIONS

TYPE	Synchronous
ROTOR INSULATION	Class H
STATOR INSULATION	Class H
TOTAL HARMONIC DISTORTION	<3.5%
TELEPHONE INTERFERENCE FACTOR (TIF)	<50
ALTERNATOR OUTPUT LEADS 3 PHASE	4 wire
BEARINGS	Sealed Ball
COUPLING	Gear Drive
LOAD CAPACITY (STANDBY RATING)	100 kW
EXCITATION SYSTEM	Brushless

NOTE: Emergency loading in compliance with NFPA 99, NFPA 110, paragraph 5-13.2.6. Generator rating and performance in accordance with ISO8528-5, BS5514, SAE J1349, ISO3046, and DIN6271 standards.

VOLTAGE REGULATOR

TYPE	Full Digita
SENSING	3 Phase
REGULATION	± 1/4%
FEATURES	Built into H-100 Control Panel V/F Adjustable Adjustable Voltage and Gain

GENERATOR FEATURES

- ❒ Revolving field heavy duty generator
- ❒ Quiet drive coupling
- ❒ Operating temperature rise 120 °C above a 40 °C ambient
- ❒ Insulation is Class H rated at 150 °C rise
- ❒ All prototype models have passed three phase short circuit testing

CONTROL PANEL FEATURES

❒ TWO FOUR LINE LCD DISPLAYS READ

Voltage (all phases)	Current (all phases)
Power factor	kW
kVAR	Transfer switch status
Engine speed	Low fuel pressure
Run hours	Service reminders
Fault history	Oil pressure
Coolant temperature	Time and date
Low oil pressure shutdown	High coolant temperature shutdown
Overvoltage	Overspeed
Low coolant level	Low coolant level
Not in auto position (flashing light)	

❒ INTERNAL FUNCTIONS

- PT function for alternator protection from line to neutral and line to line short circuits
- Emergency stop
- Programmable auto crank function
- 2 wire start for any transfer switch
- Communicates with the Generac HTS transfer switch
- Built-in 7 day exerciser
- Adjustable engine speed at exerciser
- RS232 port for GenLink® control
- RS485 port remote communication
- Canbus addressable
- Governor controller and voltage regulator are built into the master control board
- Temperature range -40 °C to 70 °C

ENGINE SPECIFICATIONS

MAKE	Generac
MODEL	V Type
CYLINDERS	10
DISPLACEMENT	8.8 Liter
BORE	3.55
STROKE	4.17
COMPRESSION RATIO	9:1
INTAKE AIR SYSTEM	Naturally Aspirated
VALVE SEATS	Hardened
LIFTER TYPE	Hydraulic

GOVERNOR SPECIFICATIONS

TYPE	Electronic
FREQUENCY REGULATION	± 1%
STEADY STATE REGULATION	± 1/2%
ADJUSTMENTS	
Speed	Yes
Droop	Yes

ENGINE LUBRICATION SYSTEM

OIL PUMP	Gear
OIL FILTER	Full flow cartridge
CRANKCASE CAPACITY	5 Quarts

ENGINE COOLING SYSTEM

TYPE	Closed
WATER PUMP	Belt driven
FAN SPEED	1850
FAN DIAMETER	28 inches
FAN MODE	Puller

FUEL SYSTEM

FUEL TYPE	Natural gas
CARBURETOR	Down Draft
SECONDARY FUEL REGULATOR	Standard
FUEL SHUT OFF SOLENOID	Standard
OPERATING FUEL PRESSURE	5" - 14" H_2O

ELECTRICAL SYSTEM

BATTERY CHARGE ALTERNATOR	12V 30 Amp
STATIC BATTERY CHARGER	12V 2 Amp
RECOMMENDED BATTERY	24F 625CCA
SYSTEM VOLTAGE	12 Volts

Rating definitions - Standby: Applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. (All ratings in accordance with BS5514, ISO3046 and DIN6271). (All ratings in accordance with BS5514, ISO3046, ISO8525 and DIN6271).

Noise Report

100 kW

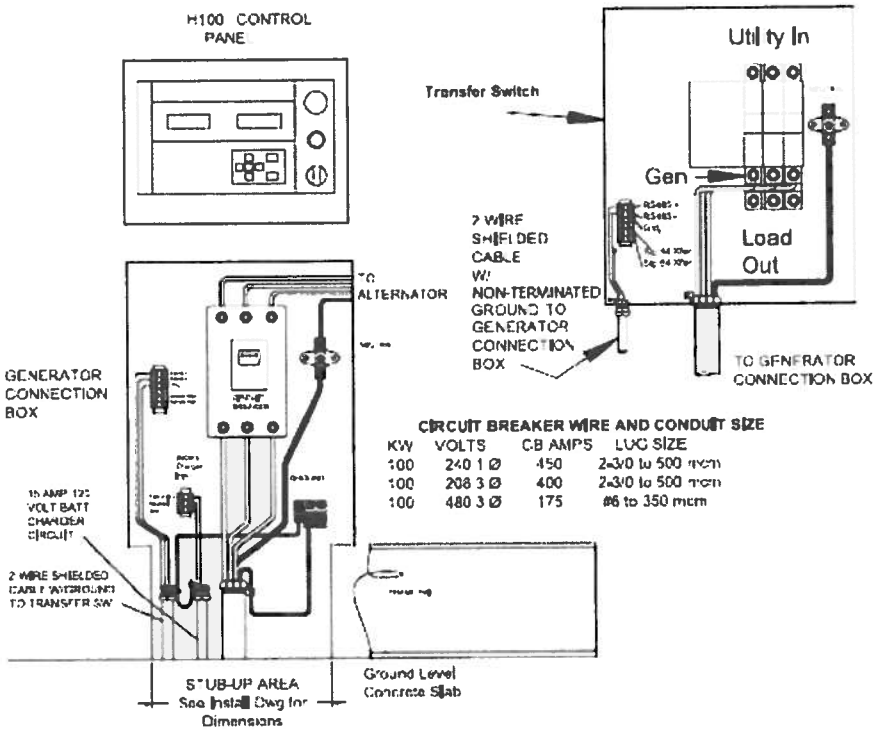
OPERATING DATA

		COMMERCIAL 100 kW		
KW RATING		100		
ENGINE SIZE		6.8 Liter V-10		
GENERATOR OUTPUT VOLTAGE/KW - 60Hz		**KW**	**AMP**	**CB Size**
120/240V, 1-phase, 1.0 pf		100	417	450
120/208V, 3-phase, 3.0 pf		100	347	400
277/480V, 3-phase, 3.0 pf		100	150	175
GENERATOR LOCKED ROTOR KVA AVAILABLE @ VOLTAGE DIP OF 35%				
Single phase or 208 3-phase		200		
480V 3-phase		240		
ENGINE FUEL CONSUMPTION (Natural Gas)				
Exercise cycle	ft³/hr.	300		
25% of rated load	ft³/hr.	371		
50% of rated load	ft³/hr.	713		
75% of rated load	ft³/hr.	991		
100% of rated load	ft³/hr.	1260		
ENGINE COOLING				
Air flow (inlet air induding alternator and combustion air)	ft³/min	6500		
Coolant capacity	US gal.	4.5		
Heat rejection to coolant	BTU/hr.	348,000		
Max. operating air temp. on radiator	°C (°F)	60 (150)		
Max. ambient temperature	°C (°F)	50 (140)		
COMBUSTION AIR REQUIREMENTS				
Flow at rated power 60 Hz	cfm	262		
SOUND EMISSIONS IN DBA				
Exercising at 7 meters		61		
Full load at 7 meters		74		
EXHAUST				
Exhaust flow at rated output 60 Hz	cfm	438		
Exhaust temp. at muffler outlet	°F	925		
ENGINE PARAMETERS				
Rated synchronous RPM	60 Hz	2300		
HP at rated KW	60 Hz	155		
POWER ADJUSTMENT FOR AMBIENT CONDITIONS				
Temperature Deration				
3% for every 10 °C above - °C		25		
1.65% for every 10 °F above - °F		77		
Altitude Deration				
1% for every 100 m above - m		182		
3% for every 1000 ft. above - ft.		600		

RATING: All three phases units are rated at 0.8 power factor. All single phase units are rated at 1.0 power factor. STANDBY RATING: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046-1. Design and specifications are subject to change without notice. kW rating is based on LPG fuel and may derate with natural gas.

INTERCONNECTIONS

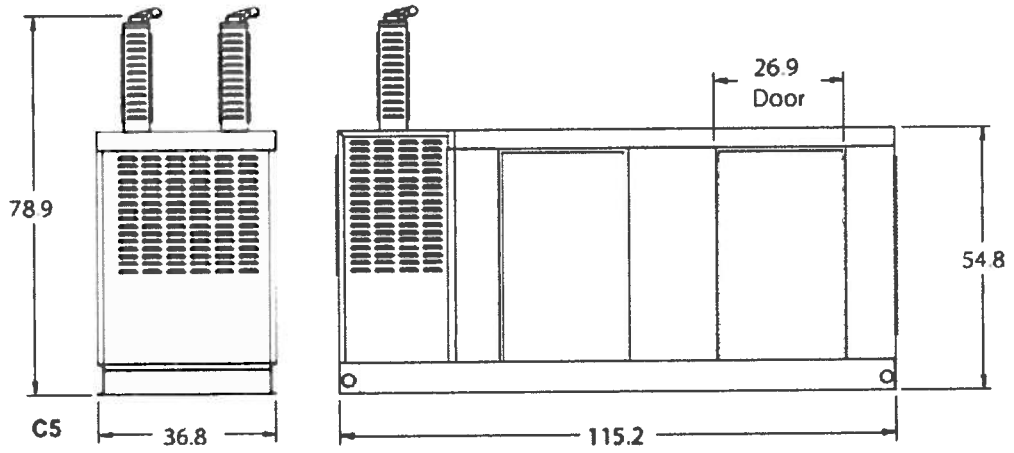
100 kW



CIRCUIT BREAKER WIRE AND CONDUIT SIZE

KW	VOLTS	CB AMPS	LUG SIZE
100	240 1 Ø	450	2-3/0 to 500 mcm
100	208 3 Ø	400	2-3/0 to 500 mcm
100	480 3 Ø	175	#6 to 350 mcm

INSTALLATION LAYOUT



UNIT WEIGHT 2705 LBS.

GENERAC® POWER SYSTEMS, INC. P.O. BOX 297 WHITEWATER, WI 53190
WEBSITE: www.guardiangenerators.com

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FINDINGS FOR APPROVAL

Commission Permit and Special Exception

1. The proposed AM Radio Transmitter provides a valuable and essential public service through the broadcast of emergency services which contributes to the general safety and welfare of the residents of Loudoun County.

2. The impact of the three proposed radio towers located within the floodplain is similar to the impacts associated with a utility corridor, which would be consistent with the Revised General Plan. The submitted Planting Plan enhances the floodplain with reforestation and mitigates the applications environmental impacts.

3. The Virginia Department of Game and Inland Fisheries has determined that the towers and noise from the generator will not have an adverse impact upon the heron rookery.

ATTACHMENT 4

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CONDITIONS OF APPROVAL – May 26, 2010

Should the Board of Supervisors wish to approve the application, staff recommends the following conditions of approval:

1. **Substantial Conformance** - This Special Exception to permit development of AM radio towers as a public utility within the floodplain shall be developed in substantial conformance with Sheets 1 of 4 and 3 of 4 (the "Special Exception Plat") of the plan set entitled "Potomac Radio, Special Exception Plat/ Commission Permit Application" dated February 2009, revised through March 2, 2010, prepared by Patton Harris Rust & Associates, PC (the "Plans"), and incorporated herein by reference and the applicable provisions of the Loudoun County Zoning Ordinance. Approval of this application for Tax Map Number /80///4////A2/ (PIN# 041-37-4022) (the "Property") shall not relieve the Applicant or the owners of the Property or any Lessee from the obligation to comply with and conform to any other Zoning Ordinance, Codified Ordinance, or applicable regulatory requirement.

2. **Riparian Planting Plan** -The Applicant shall install all the plant materials and trees in the amounts and sizes specified, at the general locations depicted on, and of a character consistent with, the "Planting Plan", dated December 20, 2009 prepared by blueskies environmental associates, inc. of Richmond, Virginia, and shown on Sheet 4 of 4 of the Plans (the "Planting Plan"). Prior to approval of the first site plan for the Special Exception use, the Applicant shall post a bond with the County in an amount and with surety satisfactory to the County sufficient to cover the cost of implementing the Planting Plan. The Applicant shall ensure that a minimum of eighty (80%) percent of the initial planting is maintaining healthy growth after each of the first six growing seasons based upon annual re-inspections by the Applicant and the County Urban Forester. Should it be determined that a minimum of eighty (80%) percent survival with uniform distribution is not achieved after any of the first six growing seasons, the applicant shall provide supplemental planting to bring the project to full stocking consistent with the "Planting Plan". The planting project shall be deemed complete and the bond shall be released: 1) at any time the County Urban Forester with the Applicant have determined the planting to be established; or 2) after the final planting following the sixth growing season.

3. **Heron Rookery** – No land disturbing or construction activities shall be performed or permitted within the area of the Special Exception during the heron nesting season defined as from February 15 through July 31 of each year. The on-site auxiliary generator may be used only in emergency situations during the said heron nesting season when electrical power has been interrupted. Periodic testing of the on-site auxiliary generator shall not be conducted during the heron nesting season to avoid potential noise impacts to the rookery.

4. **Exterior Lighting** – No permanent exterior lighting shall be permitted within the area of the Special Exception unless directed by the County or unless otherwise required by the Federal Communications Commission or the Federal Aviation Administration, State or Federal authorities.

5. **Noise** - The applicant shall incorporate noise attenuation measures in the design and operation of the facility to ensure that noise levels emanating from equipment on the Property shall comply with a maximum of 75 dBA at the Property lines.

6. **Auxiliary Generator**- The on-site auxiliary generator will be fueled by natural gas which will be supplied by an underground gas line. No fuel storage shall occur on the property.

7. **Cessation of Use** - The Applicant or its successors shall remove all unused related above ground structures and equipment from the area of the Special Exception, within 90 days of cessation of use or the expiration of the ground lease, whichever occurs first, and restore the site as closely as possible to its natural condition consistent with the Planting Plan.

8. **Advertising**- No commercial advertising shall be permitted on any tower.

9. **Communication Uses**- No antenna, satellite or microwave dish shall be attached to any tower without first obtaining approval of a new Special Exception for such use.

Note: The Applicant has agreed to provide a one-time contribution to the County in the amount of $1,000.00 for the radio towers, and an additional $0.10 per square foot of gross floor area of the transmitter building, for volunteer fire and rescue services. The $1,000.00 contribution will be paid to the County prior to issuance of a building permit for any radio tower. The $0.10 per square foot of gross floor area of the transmitter building will be paid to the County prior to the issuance of the building permit for the transmitter building. The square footage contribution shall escalate annually from the base year of 1988 and change effectively each January 1st thereafter, based on the Consumer Price Index for all urban consumers (CPI-U), 1982-1984=100 (not seasonally adjusted) as reported by the United States Department of Labor, Bureau of Labor Statistics.

FINDINGS FOR DENIAL

Commission Permit (CMPT 2009-0002 Potomac Radio)

1. The proposed AM Radio Transmitter is not consistent with the land use mix or type of uses envisioned for Keynote Employment Areas, as defined in the Revised General Plan. The policies of the Revised General Plan do not support the location of the proposed AM Radio Transmitter within a Keynote Employment Area.

2. The policies of the Revised General Plan permit only a limited number of uses within the floodplain, including passive and active recreation, road crossings and bridges, utility corridors, pervious paths and trails, and agricultural activities. The proposed AM Radio Transmitter is not one of the types of uses envisioned by the Plan to be located within the stream corridor and more specifically the major floodplain of Broad Run. The environmental policies of the Revised General Plan do not support the location of the proposed AM Radio Transmitter within the floodplain.

Special Exceptions (SPEX 2009-0011 and SPEX 2009-0002 Potomac Radio)

1. The policies of the Revised General Plan permit only a limited number of uses within the floodplain, including passive and active recreation, road crossings and bridges, utility corridors, pervious paths and trails, and agricultural activities. The proposed AM Radio Transmitter is not one of the types of uses envisioned by the Plan to be located within the stream corridor and more specifically the major floodplain of Broad Run. The environmental policies of the Revised General Plan do not support the location of the proposed AM Radio Transmitter within the floodplain.

2. The location of the proposed AM Radio Transmitter within the major floodplain of Broad Run does not comply with Sections 740.8(6) Standards for a Special Exception of the 1972 Zoning Ordinance, which states that when considering a proposed special exception use within the floodplain, the proposed use shall be "in harmony with the comprehensive plan". The environmental policies of the Revised General Plan do not support the location of the proposed AM Radio Transmitter within the floodplain. The application does not comply with the requirements of the 1972 Zoning Ordinance.

ATTACHMENT 6